

A. CLAIM AMENDMENTS

Claims 1-50: (Cancelled)

Claim 51: (Currently Amended).

Claim 51: A method for determining expression of a gene which encodes a human polypeptide that has PI3 kinase activity and a molecular weight of about 110 kiladaltons as determined by SDS-PAGE, comprising contacting ^{must be RNA} a sample with a nucleic acid molecule which hybridizes specifically to a transcript of said gene wherein said transcript is RNA or cDNA, and is selected from the group consisting of (a) the nucleotide sequence set forth in SEQ ID NO: 32; (b) the nucleotide sequence set forth in SEQ ID NO: 35; and (c) the nucleotide sequence which hybridizes to the complement of at least one of (a) and (b), at 1MNaCl, 10xDenhardt's solutions; 50mM Tris-HCL (pH 7.4); 10mM EDTA; 0.1%SDS; 100µg/ml denatured herring sperm DNA at 65°C for 16 hours, followed by a wash of 2XSSC; 0.1%SDS at 42°C, or a wash of 0.5XSSC/0.1% SDS at 50°C, or a wash at 0.1XSSC/0.1%SDS at 65°C, or a wash at 0.1XSSC/0.1% SDS, at 68°C and determining said hybridization as a determination of expression of said gene.

Claims 52-58 (Previously added).

Claim 52: The method of claim 51, wherein said nucleic acid molecule is labeled with ³²P.

Claim 53: The method of claim 51, wherein said nucleic acid molecule is an antisense, RNA molecule.

Claim 54: The method of claim 51, wherein said nucleic acid molecule is a DNA molecule.

Claim 55: The method of claim 51, wherein said method comprises polymerase chain reaction.

Claim 56: The method of claim 51, wherein said nucleic acid molecule comprises a nucleotide sequence set forth in SEQ ID NO: 12, 14, 15, 16, 17, 18, 21, 22, 24, 25, 27 or 29.

Claim 57: The method of claim 51, comprising contacting said sample with a pair of oligonucleotide primers, said pair selected from the group consisting of (i) SEQ ID NOS: 12 and 14, (ii) SEQ ID NOS: 15 and 16, (iii) SEQ ID NOS: 17 and 18, (iv) SEQ ID NOS: 21 and 22, (v) SEQ ID NOS: 24 and 25, and (vi) SEQ ID NOS: 27 and 29.

Claim 58: The method of claim 51, wherein said sample is RNA isolated from a cell sample.

Claim 59 (Cancelled).

Claims 60 & 61 (Previously Added).

Claim 60: The method of claim 51, wherein said gene encodes a human polypeptide, the amino acid sequence of which is encoded by the nucleotide sequence set forth in SEQ ID NO: 32.

Claim 61: The method of claim 51, wherein said gene encodes a human polypeptide, the amino acid sequence of which is set forth in SEQ ID NO: 37.
